

## PATENT COOPERATION TREATY

## PCT

## INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY


(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

REC'D 21 APR 2006

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Applicant's or agent's file reference P200301864 WO	<b>FOR FURTHER ACTION</b>	See Form PCT/PEA/416
International application No. PCT/EP2005/002601	International filing date (day/month/year) 10.03.2005	Priority date (day/month/year) 01.04.2004
International Patent Classification (IPC) or national classification and IPC INV. H04R1/22 H04R1/28		
Applicant SONY ERICSSON MOBILE COMMUNICATIONS AB et al.		
<p>1. This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p>3. This report is also accompanied by ANNEXES, comprising:</p> <p>a. <input type="checkbox"/> sent to the applicant and to the International Bureau) a total of sheets, as follows:</p> <p><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis of this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions).</p> <p><input type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box.</p> <p>b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) , containing a sequence listing and/or tables related thereto, in electronic form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</p>		
<p>4. This report contains indications relating to the following items:</p> <p><input checked="" type="checkbox"/> Box No. I Basis of the report</p> <p><input type="checkbox"/> Box No. II Priority</p> <p><input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p><input type="checkbox"/> Box No. IV Lack of unity of invention</p> <p><input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p><input type="checkbox"/> Box No. VI Certain documents cited</p> <p><input type="checkbox"/> Box No. VII Certain defects in the international application</p> <p><input type="checkbox"/> Box No. VIII Certain observations on the international application</p>		
Date of submission of the demand  14.10.2005	Date of completion of this report  21.04.2006	
Name and mailing address of the international preliminary examining authority:   European Patent Office - P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk - Pays Bas Tel. +31 70 340 - 2040 Tx: 31 651 epo nl Fax: +31 70 340 - 3016	Authorized officer  Fülöp, I  Telephone No. +31 70 340-1963	



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International application No.  
PCT/EP2005/002601

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**Box No. I Basis of the report**

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1. With regard to the **language**, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language , which is the language of a translation furnished for the purposes of:
- ☐ international search (under Rules 12.3 and 23.1(b))
  - ☐ publication of the international application (under Rule 12.4)
  - ☐ international preliminary examination (under Rules 55.2 and/or 55.3)
2. With regard to the **elements\*** of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:

**Description, Pages**

1-6 as originally filed

**Claims, Numbers**

1-7 as originally filed

**Drawings, Sheets**

1/2-2/2 as originally filed

☐ a sequence listing and/or any related table(s) - see Supplemental Box Relating to Sequence Listing

3. ☐ The amendments have resulted in the cancellation of:

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).

- ☐ the description, pages
- ☐ the claims, Nos.
- ☐ the drawings, sheets/figs
- ☐ the sequence listing (*specify*):
- ☐ any table(s) related to sequence listing (*specify*):

\* If item 4 applies, some or all of these sheets may be marked "superseded."

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**Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

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1. Statement

Novelty (N)	Yes: Claims	3,6,7
	No: Claims	1,2,4,5
Inventive step (IS)	Yes: Claims	
	No: Claims	1-7
Industrial applicability (IA)	Yes: Claims	1-7
	No: Claims	

2. Citations and explanations (Rule 70.7):

**see separate sheet**

**Re Item V**

**Reasoned statement with regard to novelty, inventive step or industrial applicability;  
citations and explanations supporting such statement**

I. Reference is made to the following documents:

D1: GB-A-2 347 302 (NIPPON ELECTRIC CO) 30 August 2000 (2000-08-30)  
D2: US-B-6 473 6251 (MERCER JOHN ET AL) 29 October 2002 (2002-10-29)  
D3: US-A-4 228 379 (GUSCOTT JOHN K ET AL) 14 October 1980 (1980-10-14)

II. The present application does not meet the criteria of Article 33(1) PCT, because the subject-matter of **claims 1, 2, 4 and 5** is not new in the sense of Article 33(2) PCT and the subject-matter of **claims 3, 6 and 7** is not inventive in the sense of Article 33(3) PCT.

1. Document D1, which appears to be the closest prior art document, discloses all the features of independent **claim 1** (see, especially, abstract and figures 5, 6).

**Claim 1** infringe thus Article 33(2) PCT.

2. Document D1 discloses also all the features of dependent **claims 2, 4 and 5** (see, especially, abstract and figures 1, 2, 5 and 6).

**Claims 2, 4 and 5** infringe thus also Article 33(2) PCT.

3. The features of the other dependent claims are either disclosed by the prior art documents or constructional details well known to the skilled person:

**Claims 6 and 7:** the features of these claims are well known in the art of dimensioning resonator cavities for communication units and applied by the skilled person whenever necessary in order to solve the problem posed. Indeed, document D2 discloses for instance a Helmholtz resonator (see column 3, lines 54 - 65) as claimed in claim 6 for a communication unit similar to the one claimed in claim 1. Moreover, document D3 discloses a cavity with a similar dimensioning as the one claimed in claim 7.

**Claim 3:** the features of this claim are merely constructional details well known to the skilled person and applied, whenever necessary, in order to solve the problem posed.

Thus the introduction of the features of dependent **claims 3, 6 and 7** either singly or in combination into their respective independent claim would not seem to lead to an independent

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(SEPARATE SHEET)**

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claim which would satisfy Article 33(3) PCT.

I.L.Fülöp